

/ Descriptions

TO-251 PNP Silicon PNP transistor in a TO-251 Plastic Package.

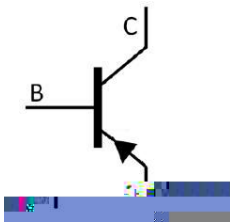
/ Features

β , h_{FE}
Low saturation voltage, excellent h_{FE} linearity and high h_{FE} .

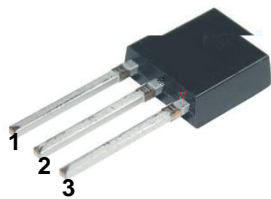
/ Applications

3
Output stage of 3 watts audio amplifier, voltage regulator, DC-DC converter and relay driver.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	R	Q	P	E
h_{FE} Range	60 120	100 200	160 320	200 400

/ Absolute Maximum Ratings(Ta=25)

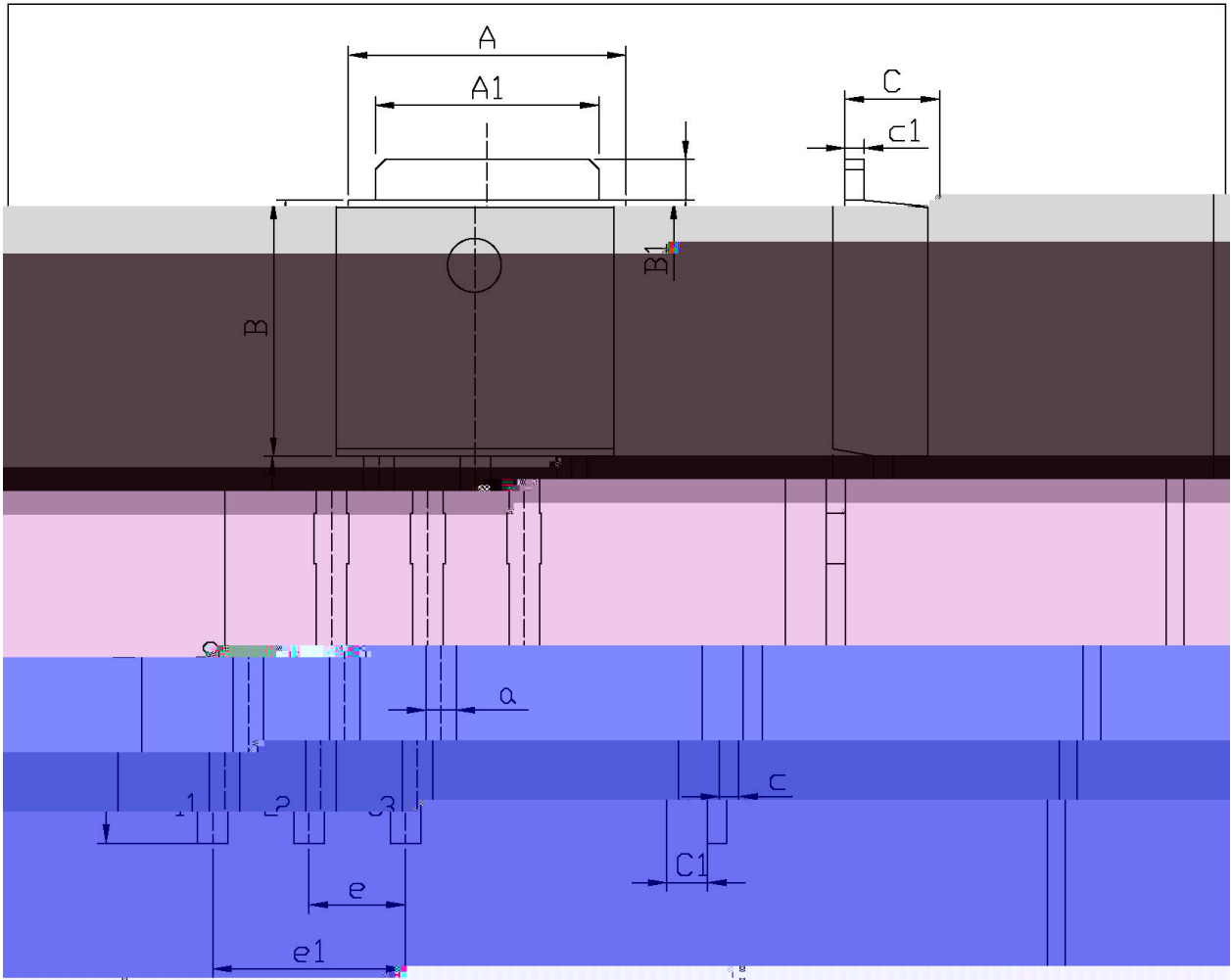
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-3.0	A
Collector Power Dissipation	P_C	1.0	W
Collector Power Dissipation	$P_C(T_C=25)$	10	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30V$ $I_E=0$			-1.0	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-3.0V$ $I_C=0$			-1.0	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-2.0V$ $I_C=-1.0A$	60	160	400	
	$h_{FE(2)}$	$V_{CE}=-2.0V$ $I_C=-20mA$	30	220		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-2.0A$ $I_B=-0.2A$		-0.3	-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-2.0A$ $I_B=-0.2A$		-1.0	-2.0	V
Transition Frequency	f_T	$I_C=-0.1A$ $V_{CE}=-5.0V$		80		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10V$ $I_E=0$ $f=1.0MHz$		55	-5.3pF	

2SB772I
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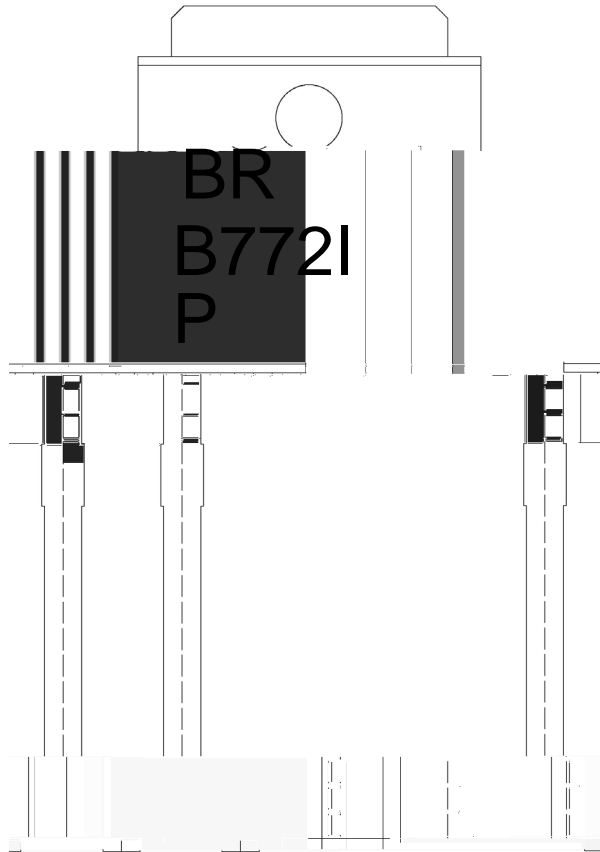
/ Package Dimensions



单位: mm

Dimensions In Millimeters		Dimensions In Millimeters		Dimensions In Millimeters	
Symbol	Min	Max	Symbol	Min	Max
a	0.50	0.70	A	6.40	6.40
b	9.00	9.40	A1	5.10	5.10
c	0.55	0.55	B	1.25	1.25
c1	0.45	0.55	B1	0.45	0.45
e	2.00	2.00	C	2.40	2.40

/ Marking Instructions



BR

B772I

P: h_{FE}

Note:

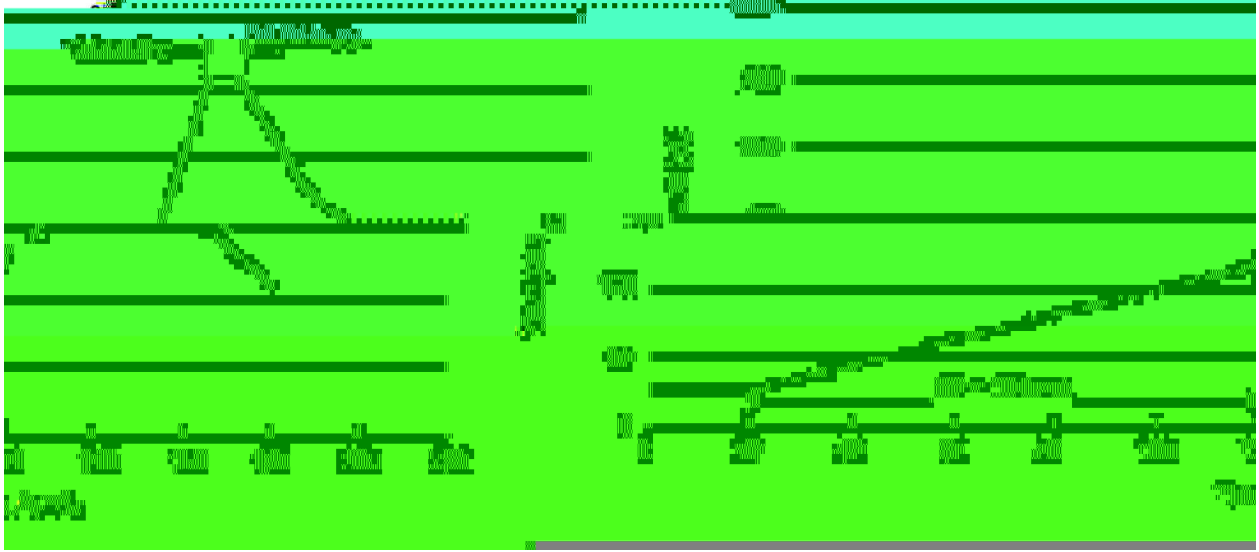
BR: Company Code

B772I: Product Type.

P: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|----------|-----------------------------------------|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units				Dimension (unit mm ³)		

/ TUBE

Package Type	Units				Dimension (unit mm ³)		

/ Notices